Public Service Company of Colorado
P. O. Box 361, Platteville, Colorado 80651

March 14, 1975

Mr. E. Morris Howard, Director
Nuclear Regulatory Commission
Region IV
Office of Inspection & Enforcement
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76012

Dear Mr. Howard:

REF: Facility Operating License
No. DPR-34

Docket No. 50-267

Enclosed please find a copy of Abnormal Occurrence Report No. 50-267/75/4-A, submitted per the requirements of the Technical Specifications.

Very truly yours,

H. Larry Brey

H. Larry Brey
Superintendent-Operations
Fort St. Vrain Nuclear
Generating Station

HLB:il

cc: Mr. Angelo Giambusso

50-267
inquiry
3248

COPY SENT REGION IV

REPORT DATE: February 5, 1975

OCCURRENCE DATE: January 25, 1975

ABNORMAL OCCURRENCE *
*Subsequently determined not to be an Abnormal Occurrence

FORT ST. VRAIN NUCLEAR GENERATING STATION
PUBLIC SERVICE COMPANY OF COLORADO
P. O. BOX 361
PLATTEVILLE, COLORADO 80651

REPORT NO. 50-267/75/4-A

Final

IDENTIFICATION OF OCCURRENCE:

When the secondary closure of refueling region #1 was loosened, Health Physics personnel detected Tritium leaking from the penetration, indicating a possible breach of the primary closure.

Such a breach would be a violation of paragraph 2.1.c of the Technical Specifications.

CONDITIONS PRIOR TO OCCURRENCE:

	Steady State Power		Routine Shutdown
	Hot Shutdown		Routine Load Change
X	Cold Shutdown		Other (specify)
	Refueling Shutdown		
	Routine Startup		

The major parameters at the time of the event were as follows:

Power	Rtr	0	MWth
	Elect.	0	MWe
Secondary Coolant	Pressure	N/A	psig
	Temperature	N/A	°F
	Flow	N/A	#/hr.
Primary Coolant	Pressure	87	psig
	Temperature	275	°F Core Inlet
		260	°F Core Outlet
	Flow	Less than 100,000	#/hr.

Note: Average core temperature is lower than core inlet because the Primary Coolant was being heated by passing steam through the reheat section of the steam generators.

DESCRIPTION OF OCCURRENCE:

Testing of the operability of Reserve Shutdown Hoppers after modifying the pressurizing supply lines to a "soft seat" type revealed the inability to trip the test switch in No. 1 CRD with 35# pressure. It was decided to check the pressurizing line in No. 1 refueling penetration.

The secondary closure plate on refueling penetration #1 was being removed to examine the Reserve Shutdown pressurizing line. Routine Health Physics coverage established that tritium levels around the secondary seal went to approximately twice background when the cover hold down bolts were loosened. This indicated a possible communication of the penetration interspace with the primary coolant (i.e.; a breach of the primary closure).

The secondary cover plate was retightened to stop any outleakage and Tritium levels dropped to the previous background level.

The leak, if any, through the primary closure, is less than the allowable for the group, as shown on flow gauges.

APPARENT CAUSE OF OCCURRENCE:

The helium used to pressurize the interspaces on all refueling penetrations is obtained from the high pressure helium storage bottle. This source of helium is replenished from the helium storage system. During depressurization of the primary coolant system, helium is bled from the purification system ahead of the hydrogen getter unit to storage. This helium would, therefore, contain hydrogen and tritium above background levels. Therefore, when the secondary closure plate was lifted and an increase in tritium levels was noted, the increase above background was due to the normal presence of tritium in the pressurizing gas.

ANALYSIS OF OCCURRENCE:

There was no Abnormal Occurrence. Examination of the primary closure seals and pressurization of the interspace revealed no leakage.

CORRECTIVE ACTION:

Not necessary.

FAILURE DATA/
SIMILIAR REPORTED OCCURRENCES:

None

PROGRAMMATIC IMPACT:

None expected due to concurrent maintenance requirements.

CODE IMPACT:

None

RECOMMENDED:

Frank Mathie
Superintendent-Maintenance
Fort St. Vrain Nuclear
Generating Station

APPROVED:

Frederic E. Swart
Superintendent Nuclear Production
Public Service Company
of Colorado